

(b)

?S PN=JP 7179557
S3 1 PN=JP 7179557
?T S3/7

3/7/1
DIALOG(R) File 352:Derwent WPI
(c) 2001 Derwent Info Ltd. All rts. reserv.

010379641

WPI Acc No: 1995-280955/199537

Polyurethane prodn., useful for sheet, film, chain, belt, binder, car parts, etc. - by reacting polyesterdiol(s), diisocyanate(s), 1,4-butanediol, and aliphatic diol(s)

Patent Assignee: KURARAY CO LTD (KURS)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7179557	A	19950718	JP 94277956	A	19941111	199537 B

Priority Applications (No Type Date): JP 93283152 A 19931112

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7179557	A		7	C08G-018/42	

Abstract (Basic): JP 7179557 A

Polyurethane (PU) is obtd. by reacting polyesterdiols, diisocyanates, 1,4-butanediol and an aliphatic diols of formula $\text{HO}-(\text{CH}_2)_n-\text{OH}$ (I), $n = \text{integer } 5-10$, wherein the polyesterdiol (mol. wt. = 22000-3500) comprises a diol component (mainly 1,9-nonanediol and 3-methyl-1,5-pentanediol) and a dicarboxylic acid component, and satisfies the equations $c/(c+d)$ is 0.3-0.7 (A), $e/(e+f)$ is 0.7-0.98 (B) and $b/(a+e+f)$ is 1.00-1.10 (C). $c = \text{mol fraction of 1,9-nonanediol in total diols}$; $d = \text{mol fraction of 3-methyl-1,5-pentanediol in total diols}$; $a = \text{mol no. of polyesterdiols}$; $b = \text{mol no. of diisocyanates}$; $e = \text{mol no. of 1,4-butanediol}$; $f = \text{mol no. of aliphatic diols of formula (I-I)}$. Also claimed are (1) the aliphatic diols (I) is 1,9-nonanediol (ND). (2) A moulding prepared from the polyester-based PU. (3) Mfg. method of a PU moulding by heat-treating the moulded PU at least 60deg. C.

USE - Product is used to substitute rubber/plastics in wide range of applications, e.g., sheet, film, chain, belt, rolls, caster, binder, car parts, shoe soles, packing material, damping material, elastic fibre and adhesives.

ADVANTAGE - Product excels in all aspects of hardness, heat resistance, cold resistance and compression set. By applying a heat treatment, performances are much improved.

Dwg. 0/0

Derwent Class: A25; F01; G03

International Patent Class (Main): C08G-018/42

International Patent Class (Additional): C08G-018/66